BRUHATH BENGALURU MAHANAGARA PALIKE

EXECUTIVE ENGINEER, YELAHANKLA DIIVISION

Name of Work:Modified Estimate For Drilling of Borewell and Erection of Pumpset, Electrification to Borewell at Nagenahalli, Herohalli, Kenchanahalli Village Areas in Attur Ward No.01 of Yelahanka Sub Division.

SL No	Particulars	Unit	Nos	L in m	B in m	D in m	Quantity	Rate in Rs.	Amount in Rs.
	BOREWELL MAINTENANCE								
1	Labour charges for Lifting of non functioning submersible pump set along with cable and GI pipes (Each length = 6m)). for 50 mm (BW SSB SR 2023-24 P- 142 Item No.12.24)								
		Job							
							3.00	259.36	778.08
	Approved Amount	259.36							
2	Labour charges for Erection of new / repaired submersible pump set along with GI pipes (32mm / 50mm), cable (New submersible pump set if required will be supplied by the department free of cost and released pump set should be handed over to department) including transportation (Each length = 6 m) (BWSSB SR 2023-24 P- 142 Item No.-12.28)								
		Job							
							3.00	211.79	635.37
	Approved Amount	211.79							
3	Supplying and Drawing 3 Core Flat PVC Shelted Submerisible Pump Cable Manufactured With Electrolytic grade copper with flexible copper conductor confirming to table 3 class 5of IS 8130-1984 and Virgin PVC insulation and Sheeated Suitable for working Voltage Upto 1100 Volts as per IS-694:1990. 3C x 4.0Sqm (Page No:7 Iten No:2.6.2 ELE SR SR 2023-24)								
		RMT							
							0.00	172.97	0.00
	Approved Amount	172.97							
4	Supplying and Drawing 3 Core Flat PVC Shelted Submerisible Pump Cable Manufactured With Electrolytic grade copper with flexible copper conductor confirming to table 3 class 5of IS 8130-1984 and Virgin PVC insulation and Sheeated Suitable for working Voltage Upto 1100 Volts as per IS-694:1990. 3C x 6.0Sqm (Page No:7 Iten No:2.6.3 ELE SR SR 2023-24)								
		RMT							
							0.00	252.25	0.00
	Approved Amount	252.25							
5	Fabricating supplying and mounting MS box made out 14SWG suitable for floor /wall mounting, fully weather proof with provision for better heat dissipation, provided with hinged front cover, equipped with tamper proof locking arrangements, with suitable size clamps with necessary cable entry pipe with gland and box should be finished with 7tanks treatment with powder coated paint and finally finished with approved colour etc., complete., (PWD Electrical SR- 2022-23 , Page No:20, Item No:5.42.1) 1200x850x2=2040000, 850x350x2=595000, (350+450)/2=400, 400x1200=480000, 480000x2=960000, 3595000/100=35950Sqcm								
		Sqcm							
			3		35950.00		107850.00		
						Total Qty	107850.00	0.51	55003.50
	Approved Amount	0.51							
6	Supplying and fixing angle iron frame work fabricated out of M.S. angle iron.. and M.S. Flat.....with bolts, washers etc., and painted with 2 coats of red oxide and then two coats of approved paint. 40 x 40 x 6 mm (PWD Electrical SR 2023-24 , Page NO:20, Item No:5.41.1.(Per leg 2. 5MtrX2 Nos legs)-5.00 Mtr Per Box								
		Mtrs							
			3	5.00			15.00	314.03	4710.45
	Approved Amount	314.03							
7	Supply and fixing polished wood board made of not less than 15mm thick plank on both sides of not more than 2 pieces and fixing the same to the wall using tapered inverted wooden plugs screws. F) 20" x 20" x 2.5" (PWD Electrical SR 2023-24 P-14, I-5.6.6)								

SL	Particulars	Unit	Nos	L in m	B in m	D in m	Quantity	Rate in Rs.	Amount in Rs.
		Each							
			3				3.00	335.78	1007.34
	Approved Amount	335.78							
8	Supplying & fixing miniature circuit breakers on existing MCB distribution boards using necessary fixing materials and 'C' Type curve, indicator ON/OFF, energy cross-3 with Short circuit breaking capacity of 10K and complete wiring as required confirming to IEC 60898. (PWD Electrical SR 2023-24 P-18, I- 5.18.9)								
		Each							
			3				3.00	3179.40	9538.20
	Approved Amount	3179.40							
9	Supplying & fixing of Porcelain fuse channel with cutout on existing wooden/panel using necessary nuts, bolts and washers. (PWD Electrical SR 2023-24 P-14, I-5.7.3)								
		Each							
			3				3.00	412.87	1238.61
	Approved Amount	412.87							
10	Earthing: Suppluing and fixing and wiring earth electrode for grounding circuits IC cutouts and other equipments on the meter board in the pit. The pits should be filled up with equal proportion of salt and charcoal 150mm around the pipe to complete depth. The connection from the pipe to the conduits etc. is to established through GI wire of sizes as per clause 7.3.3 of IS 732 using 12mm bolts,nuts, washers and check nuts, the pipe shall have 16 through holes of 12mm dia. (PWD Electrical SR 2022-23, P-54, Item No.12.56)								
		No							
			3				3.00	3613.90	10841.70
	Approved Amount	3613.90							
11	Providing, Laying and Fixing of GI pipes conforming to IS 1239:1990 with latest amendments complete with GI fittings (excluding the cost of fittings) with cuts and threads wherever necessary, including testing for water tightness, with all lead and commissioning. (contractor will make his own arrangements for procuring water for testing) For:Heavy Duty GI Pipe etc. complete. Light Duty GI pipe of 50mm dia (BWSSB SR 2023-24 P-127, I-11.1.6)								
		Mtrs							
							0.00	500.59	0.00
	Approved Amount	500.59							
12	Providing Submersible Pump Set of 150mm dia suitable for bore well and confirming to IS 8034-2000;3Phase, SS Bowl & Impeller with Low volt Motor as per specifications, to work site as per necessary ammendments and instructions of engineer incharge of work.(BWSSB 2023-24, P-153, I-13.17.7, 13.16.7 & 13.18.6)								
	10.00 HP - 90 LPM @ 220 m = 20 STG Outlet Dia - 2.00"	No							
			3				3.00	61851.37	185554.11
	Approved Amount	61851.37							
13	Supply, installing,testing and commissioning COMMON control panel consisting of the following INCOMING:1 No set of Phase indicating lamps with SFU of suitable rating 1 No, Analog Ammeter, 1 No Analog Voltmeter 1ni with Phase selector switch, Isolating switch OUTGOING for Main Electrical Pump: 1 No. MCB 1 No. DOL of S/D Starter suitable for respective HP 1 No. Electrcal Protection Like single Phase preventor, under voltage over Volage, under current over current & dry run protection suitable for the pump described above 1 no Indoor type NOTE: 1) DOL-Direct Online Starter 2) S-D- Star Delta Starter etc. complete.6 to 15 HP pumps (BWSSB, SR 2023-24, P-155, Item No.13.23.3)								
		Each							
			3				3.00	18007.70	54023.10
	Approved Amount	18007.70							

SL No	Particulars	Unit	Nos	L in m	B in m	D in m	Quantity	Rate in Rs.	Amount in Rs.
14	Supply and delivery at site of brand new best make non-return valve as per IS 778/1984 with ISI Mark and as per its latest amendments Size 50mm dia (BWSSB SR 2023-24, P.154, I-13.25.1)								
		Each							
			20				20.00	1415.70	28314.00
	Approved Amount	1415.70							
15	Supply and delivery at site wrought middle steel (galvanized) GI union confirming to IS 1239-II, 1991 with latest amendments if any. For 50 mm dia GI Union (BWSSB SR 2023-24 P-131, I-11.12.6)								
		Each							
			20				20.00	302.39	6047.80
	Approved Amount	302.39							
16	Supply and delivery at site wrought middle steel (galvanized) GI elbow confirming to IS 1239-II, 1991 with latest amendments if any. For 50 mm dia GI Union (BWSSB SR 2023-24 P-129, I-11.7.6)								
		Each							
			20				20.00	302.39	6047.80
	Approved Amount	302.39							
17	Supply and delivery at site wrought middle steel (galvanized) GI hexagonal nipple confirming to IS 1239-II, 1991 with latest amendments if any. For 50 mm dia GI hexagonal nipple (BWSSB SR 2023-24 P-132, I-11.14.6)								
		Each							
			20				20.00	241.24	4824.80
	Approved Amount	241.24							
18	Providing wrought mild steel (galvanized) GI collar confirming to IS 1239-II, 1991 with latest amendments if any. For 50 mm dia GI collar (BWSSB SR 2023-24 P-129, I-11.14.6)								
		Nos							
			0				0.00	302.39	0.00
	Approved Amount	302.39							
19	Cutting and threading G.I. pipes for pump fitting, public fountains with appurtenances., where the length of pipe laid is less than 6 metres Pipes of dia 32mm to 80mm (BWSSB SR 2023-24 P-15, I-2.2.2)								
		Each							
			0				0.00	364.68	0.00
	Approved Amount	364.68							
	PVC Pipe Line Maintenance								
20	Cutting Asphalt /Concrete road surface using machine cutter for leakage pit with earth work excavation in all classifications of soil including all lead and lifts bailing out water with pumps including barricading, danger lighting etc., as per requirement and disposing of the excavated stuff as directed. After attending the leak, refilling the trench for 30 cm depth quarry dust above and around pipelines and balance with available earth in layers not exceeding 20 cms in depth, compacting Each deposited layer by ramming including watering and consolidation by mechanical means approved by Engineer Incharge. (Work to be carried out as per leak repair manual and the rate includes hire charges of dewatering Pump, tractor, Jeep with all kinds of Labour in a Complete manner). (BWSSB SR 2023-24, V-5, Page No.48, Item No.3.3)								
		Cum							
Temple Road from RO Plant in Srinivasapura			1	156.00	0.60	0.15	14.04		
Srinivasapra Road From Sai Thirumala Provision Store			1	325.00	0.60	0.15	29.25		
From Sai Thirumala Provision Store			1	130.00	0.60	0.15	11.70		
Cross Road-1			1	50.00	0.60	0.15	4.50		
Cross Road-2			1	55.00	0.60	0.15	4.95		
Cross Road-3			1	45.00	0.60	0.15	4.05		
Cross Road-5			1	105.00	0.60	0.15	9.45		
Cross Road-6			1	49.00	0.60	0.15	4.41		
Cross Road-7			1	30.00	0.60	0.15	2.70		
Park To Burial Ground			1	80.00	0.60	0.15	7.20		

SL No	Particulars	Unit	Nos	L in m	B in m	D in m	Quantity	Rate in Rs.	Amount in Rs.
	Burial Ground to RO Plant		1	110.00	0.60	0.15	9.90		
	KEB layout Road No.04		1	217.00	0.60	0.15	19.53		
	KEB layout Road No.05		1	256.00	0.60	0.15	23.04		
	KEB layout Road		1	238.00	0.60	0.15	21.42		
	Approved Amount	1310.37				**Total Qty**	**166.14**	**1310.37**	**217704.87**
21	Earth work excavation for pipelines/cables by Manual means upto 600 mm trench width, as per drawing and technical specifications, including setting out, shoring, strutting, barricading, caution lights, removal of stumps and other deleterious matter, including dressing of excavated surfaces, disposing off or leveling the excavated earth or sorting & stacking the selected earth for reuse in a radius of 50 m. Filling available excavated earth (excluding rock) in trenches, plinth, sides of foundations etc. in layers not exceeding 20cm in depth, consolidating each deposited layer by ramming and watering and lift upto 1.5 m including cost of labour, tools, usage& other appurtenances required to complete the work. In all kinds of soils. Depth upto 1.50m (KPWD SR 2023-24, V-I, Page No.6, Item No.1.6.1)								
		Cum							
	For Pipe Line								
	Temple Road from RO Plant in Srinivasapura		1	156.00	0.60	0.30	28.08		
	Srinivasapra Road From Sai Thirumala Provision Store		1	325.00	0.60	0.30	58.50		
	From Sai Thirumala Provision Store		1	130.00	0.60	0.30	23.40		
	Cross Road-1		1	50.00	0.60	0.30	9.00		
	Cross Road-2		1	55.00	0.60	0.30	9.90		
	Cross Road-3		1	45.00	0.60	0.30	8.10		
	Cross Road-5		1	105.00	0.60	0.30	18.90		
	Cross Road-6		1	49.00	0.60	0.30	8.82		
	Cross Road-7		1	30.00	0.60	0.30	5.40		
	Park To Burial Ground		1	80.00	0.60	0.30	14.40		
	Burial Ground to RO Plant		1	110.00	0.60	0.30	19.80		
	KEB layout Road No.04		1	217.00	0.60	0.30	39.06		
	KEB layout Road No.05		1	256.00	0.60	0.30	46.08		
	KEB layout Road		1	238.00	0.60	0.30	42.84		
	Approved Amount	548.16				**Total Qty**	**332.28**	**548.16**	**182142.60**
22	Providing PVC ringtite pipes conforming to IS 985:2000 with latest amendments and conveying to worksite, rolling and lowering into trenches, laying true to line and level and perfect linking at joints, testing and commissioning, including loading unloading at both destinations and cuts of pipes wherever necessary including jointing of PVC pipes and specials (excluding cost of specials) with jointing of approved type, with all labour with all lead & lift including encasing the pipe alround to a depth of not less than 15 cms. with soft gravel or selected earth available from the excavation etc. complete and giving necessary hydraulic test to the required pressure as per ISS (Contractor will make his own arrangements for procuring water for testing) etc. complete For: PVC pipes 50mm dia., 6 kg/sqcm & class 5 (BWSSB SR 2023-24, Page No.113 Item No.10.1.3)								
		Mtrs							
	Temple Road from RO Plant in Srinivasapura		1	156.00			156.00		
	Srinivasapra Road From Sai Thirumala Provision Store		1	325.00			325.00		
	From Sai Thirumala Provision Store		1	130.00			130.00		
	Cross Road-1		1	50.00			50.00		
	Cross Road-2		1	55.00			55.00		
	Cross Road-3		1	45.00			45.00		
	Cross Road-5		1	105.00			105.00		
	Cross Road-6		1	49.00			49.00		
	Cross Road-7		1	30.00			30.00		
	Park To Burial Ground		1	80.00			80.00		
	Burial Ground to RO Plant		1	110.00			110.00		

SL No	Particulars	Unit	Nos	L in m	B in m	D in m	Quantity	Rate in Rs.	Amount in Rs.
	KEB layout Road No.04		1	217.00			217.00		
	KEB layout Road No.05		1	256.00			256.00		
	KEB layout Road		1	238.00			238.00		
						Total Qty	1846.00	114.39	211163.94
	Approved Amount	220.00							
23	Refilling available earth around trenches/pipelines, cables in layers not exceeding 20 cms in depth, compacting each deposited layer by ramming after watering with a lead upto 50 m, and lift upto 1.5 m. Including cost of all labour complete as per specifications (KPWD SR 2023-24, V-I, Page No.7, Item No.1.10)								
		Cum							
	Temple Road from RO Plant in Srinivasapura		1	156.00	0.60	0.23	21.53		
	Srinivasapra Road From Sai Thirumala Provision Store		1	325.00	0.60	0.23	44.85		
	From Sai Thirumala Provision Store		1	130.00	0.60	0.23	17.94		
	Cross Road-1		1	50.00	0.60	0.23	6.90		
	Cross Road-2		1	55.00	0.60	0.23	7.59		
	Cross Road-3		1	45.00	0.60	0.23	6.21		
	Cross Road-5		1	105.00	0.60	0.23	14.49		
	Cross Road-6		1	49.00	0.60	0.23	6.76		
	Cross Road-7		1	30.00	0.60	0.23	4.14		
	Park To Burial Ground		1	80.00	0.60	0.23	11.04		
	Burial Ground to RO Plant		1	110.00	0.60	0.23	15.18		
	KEB layout Road No.04		1	217.00	0.60	0.23	29.95		
	KEB layout Road No.05		1	256.00	0.60	0.23	35.33		
	KEB layout Road		1	238.00	0.60	0.23	32.84		
							254.75	181.21	46162.89
	Approved Amount	181.21							
24	Providing, laying, spreading and compacting graded stone aggregate to **wet mix macadam** specification including premixing the Material with water at OMC in mechanical mix plant carriage of mixed Material by tipper to site, laying in uniform layers with paver/grader in sub-base / base course on well prepared surface and compacting with vibratory roller to achieve the desired density. (KPWD SR 2023-24, V-III, Page No.26, Item No.4.17)								
		Cum							
	For Pipe Line								
	Temple Road from RO Plant in Srinivasapura		1	156.00	0.60	0.10	9.36		
	Srinivasapra Road From Sai Thirumala Provision Store		1	325.00	0.60	0.10	19.50		
	From Sai Thirumala Provision Store		1	130.00	0.60	0.10	7.80		
	Cross Road-1		1	50.00	0.60	0.10	3.00		
	Cross Road-2		1	55.00	0.60	0.10	3.30		
	Cross Road-3		1	45.00	0.60	0.10	2.70		
	Cross Road-5		1	105.00	0.60	0.10	6.30		
	Cross Road-6		1	49.00	0.60	0.10	2.94		
	Cross Road-7		1	30.00	0.60	0.10	1.80		
	Park To Burial Ground		1	80.00	0.60	0.10	4.80		
	Burial Ground to RO Plant		1	110.00	0.60	0.10	6.60		
	KEB layout Road No.04		1	217.00	0.60	0.10	13.02		
	KEB layout Road No.05		1	256.00	0.60	0.10	15.36		
	KEB layout Road		1	238.00	0.60	0.10	14.28		
						Total Qty	110.76	2898.22	321006.85
	Approved Amount	2898.22							

Sl No	Particulars	Unit	Nos	L in m	B in m	D in m	Quantity	Rate in Rs.	Amount in Rs.
25	Providing and laying in position Cement Concrete for all Super structures of building , Road works, Water works, Irrigation works & super structure works of bridges upto 3.50 m height. The granite/trap/basalt crushed graded coarse aggregates and fine aggregates as per relevant IS Codes machine mixed with super plasticisers laid in layers, well compacted using needle vibrators. The cost includes all lead & lifts, cost of all materials, quality confirming to the requirements of relevant IS codes , labour, Usage charges of machinery, curing and all other appurtenances required to complete the work as per technical specifications. M20 Design Mix Using 20 mm nominal size graded crushed coarse aggregates (KPWD SR 2023-24, V-I, Page No.16, Item No.2.5.1)								
		Cum							
	For Pipe Line								
	Temple Road from RO Plant in Srinivasapura		1	156.00	0.60	0.15	14.04		
	Srinivasapra Road From Sai Thirumala Provision Store		1	325.00	0.60	0.15	29.25		
	From Sai Thirumala Provision Store		1	130.00	0.60	0.15	11.70		
	Cross Road-1		1	50.00	0.60	0.15	4.50		
	Cross Road-2		1	55.00	0.60	0.15	4.95		
	Cross Road-3		1	45.00	0.60	0.15	4.05		
	Cross Road-5		1	105.00	0.60	0.15	9.45		
	Cross Road-6		1	49.00	0.60	0.15	4.41		
	Cross Road-7		1	30.00	0.60	0.15	2.70		
	Park To Burial Ground		1	80.00	0.60	0.15	7.20		
	Burial Ground to RO Plant		1	110.00	0.60	0.15	9.90		
	KEB layout Road No.04		1	217.00	0.60	0.15	19.53		
	KEB layout Road No.05		1	256.00	0.60	0.15	23.04		
	KEB layout Road		1	238.00	0.60	0.15	21.42		
	Approved Amount	7508.87				**Total Qty**	**166.14**	**7508.87**	**1247523.66**
	NEW BOREWELL								
26	Geophysical investigation at site for sinking borewells for Providing drinking water to the habitation either through the Hand Pump MWS or P.W.S.S, by vertical electrical sounding by adopting Venner or Schlumbergers's method, including reconnaissance survey of geological formation. Geophysical investigation of existing ground water in the vicinity, its quality, quantity and acceptability of the users, indicating the location of the site, recommended depth of casing pipe required to seal the top unconsolidated formation including an extra depth of 1.0 metre in consolidated formation for proper seating of casing pipe, depth of drilling required to cover full depth of aquifer proposed to be tapped, probable yield and other information required including transportation of instruments and accessories to work site, engaging technical personal and labour required etc. NOTE: 1) Additional rate on item 1&2 is allowed for drilling in over burden and fixing Casing pipes beyond 20 M (for fixing Casing pipes only) a) Above 20 M and upto 30 M - 15%, b) Above 30 M - 30% (Measurement of overburden is restricted to the depth of casing pipe fixed excluding initial depth of 20M and projection above ground level). 2) A sum of Rs. 100/- is to be deducted for Dry Borewell towards yield test. etc. complete (Page No.140, Sl No.12.4, BWSSB SR 2023-24)								
		Each							
	Sinking borewells		5				5.00		
	Approved Amount	5988.98					**5.00**	**5988.98**	**29944.90**
27	Sinking of Borewell of 165mm dia clear using super fast hydraulic rig of capacity 300 PSIG & above 1100 CMF & above in all strata including over burdern upto 20 m. Fixing of casing pipes, collars and cap with necessary cutting, threading and welding including transportation of rig and supporting vehicle, crew charges and cost of consumables etc., complete including yield testing at the final depth with a minimum working of compressor for one hour (Excluding cost of casing pipes, collars, cap etc., complete) (Above 450m of drilling add 10% for every 50m depth) (Page No.139 Sl No.12.1, BWSSB SR 2023-24)								
		rmt							
	a) 0.00 to 50.00 mtrs		5			50.00	250.00	**419.05**	**104762.50**

SL No	Particulars	Unit	Nos	L in m	B in m	D in m	Quantity	Rate in Rs.	Amount in Rs.
	Approved Amount	419.05							
28	b) 50.00 to 100.00 mtrs		5			50.00	250.00	525.51	131377.50
	Approved Amount	525.51							
29	c) 100.00 to 150.00 mtrs		5			50.00	250.00	558.35	139587.50
	Approved Amount	558.35							
30	d) 150.00 to 200.00 mtrs		5			50.00	250.00	647.82	161955.00
	Approved Amount	647.82							
31	e) 200.00 to 250.00 mtrs		5			50.00	250.00	759.95	189987.50
	Approved Amount	759.95							
32	f) 250.00 to 300.00 mtrs		5			50.00	250.00	838.09	209522.50
	Approved Amount	838.09							
33	g)300.00 to 350.00 mtrs		5			12.00	60.00	983.06	58983.60
	Approved Amount	900.00							
34	Supply of ISI mark 175mm nominal bore,plain and steel casing pipe grade of steel Fe 410 of wall thickness conforming to IS 4270-2001 and latest ammendments, electrical resistance welded steel tubes, material and conforming to IS 1387-1993 and manufactured by basic open hearth electric or basic oxygen process in random length of 5-7m both ends.threaded conforming to IS 554-1985 one end fixed with socket conforming to IS 4270-2001 and the other end with screwed pipes all shall be responsibaly free from defects. The tubes shall be responsible straight end should be with ISI marking weighing 25.10kg/m.prices include Collar-Medium duty. (Page No.143, It no.12.32, BWSSB Sr-2023-24)								
	a) Casing Pipe	**rmt**							
			5	58.00			290.00		
						Total Qty	**290.00**	**2189.24**	**634879.60**
	Approved Amount	2189.24							
35	Providing Submersible Pump Set of 150mm dia suitable for bore well and confirming to IS 8034-2000;3Phase, SS Bowl & Impeller with Low volt Motor as per specifications, to work site as per necessary ammendments and instructions of engineer incharge of work. For 12.50 HP - 90 LPM @ 264 m = 24 STG Outlet Dia - 2.00" (BWSSB 2023-24, P-153, I-13.17.7)								
		Nos							
			4				4.00	72658.81	290635.24
	Approved Amount	72658.81							
36	Supplying and Drawing 3 Core Flat PVC Shelted Submerisible Pump Cable Manufactured With Electrolytic grade copper with flexible copper conductor confirming to table 3 class 5of IS 8130-1984 and Virgin PVC insulation and Sheeated Suitable for working Voltage Upto 1100 Volts as per IS-694:1990. 3C x 6.0Sqm (Page No:7 Iten No:2.6.3 ELE SR SR 2023-24)								
		mtr							
	for new borewells	4	2	260.00			2080.00		
						Upto 125%	1450.00	252.25	365762.50
						Above 125%	630.00	237.75	149781.24
	Rate Analysis								
	Basic Rate Rs.	245.00							
	TP 2.96%	**7.25**							
	Total	**237.75**							
37	Supply and delivery at site of brand new best make non-return valve as per IS 778/1984 with ISI Mark and as per its latest amendments Size 50mm dia (BWSSB SR 2023-24, P.154, I-13.25.1)								
		Each							
			4				4.00	1415.70	5662.80
	Approved Amount	1415.70							
38	Supply and delivery at site of brand new best make gate valve as per IS 778/1984 with ISI Mark and as per its latest amendments Size 50 mm (Page No.154 Item No.13.24.1, BWSSB SR- 2023-24)								

Sl No	Particulars	Unit	Nos	L in m	B in m	D in m	Quantity	Rate in Rs.	Amount in Rs.
		Nos							
			4				4.00	1415.70	5662.80
	Approved Amount	1415.70							
39	Supply and delivery at site wrought middle steel (galvanized) GI union confirming to IS 1239-II, 1991 with latest amendments if any. For 50 mm dia GI Union (BWSSB SR 2023-24 P-131, I-11.12.6)								
		Nos							
			4	1.00			4.00	302.39	1209.56
	Approved Amount	302.39							
40	Providing, Laying and Fixing of GI pipes conforming to IS 1239:1990 with latest amendments complete with GI fittings (excluding the cost of fittings) with cuts and threads wherever necessary, including testing for water tightness, with all lead and commissioning. (contractor will make his own arrangements for procuring water for testing) For:Heavy Duty GI Pipe etc. complete. Light Duty GI pipe of 50mm dia (BWSSB SR 2023-24 P-127, I-11.1.6)								
		mtr							
			4	259.50			1038.00	500.59	519612.42
	Approved Amount	500.59							
41	Supply and delivery at site wrought middle steel (galvanized) GI union confirming to IS 1239-II, 1991 with latest amendments if any. For 50 mm dia GI Union (BWSSB SR 2023-24 P-131, I-11.12.6)								
		Each							
			4				4.00	302.39	1209.56
	Approved Amount	302.39							
42	Supply, installing,testing and commissioning COMMON control panel consisting of the following INCOMING:1 No set of Phase indicating lamps with SFU of suitable rating 1 No, Analog Ammeter, 1 No Analog Voltmeter 1ni with Phase selector switch, Isolating switch OUTGOING for Main Electrical Pump: 1 No. MCB 1 No. DOL of S/D Starter suitable for respective HP 1 No. Electrcal Protection Like single Phase preventor, under voltage over Volage, under current over current & dry run protection suitable for the pump described above 1 no Indoor type NOTE: 1) DOL-Direct Online Starter 2) S-D- Star Delta Starter etc. complete.6 to 15 HP pumps (BWSSB, SR 2023-24, P-155, Item No.13.23.3)								
		Each							
			4				4.00	18007.70	72030.80
	Approved Amount	18007.70							
43	Labour charges for Erection, Electrification and commissioning of Pump sets, including aligning and balancing of all items including supply and erection of two pair of supporting clamps, bore well caps, cable clips and water tight gland cable protectors, bolts, nuts, valve and gauges,tools and equipments etc., involved in the job as per specifications, with necessary tests as per specifications, with testing of as per instructions of engineer incharge of work. (Page No.156 / Item No. 13.32, BWSSB SR-2023-24)								
		Job							
			4				4.00	7361.64	29446.56
	Approved Amount	7361.64							

SL No	Particulars	Unit	Nos	L in m	B in m	D in m	Quantity	Rate in Rs.	Amount in Rs.
44	Supply and fixing polished wood board made of not less than 15mm thick plank on both sides of not more than 2 pieces and fixing the same to the wall using tapered inverted wooden plugs screws. F) 20" x 20" x 2.5" (PWD Electrical SR 2023-24 P-14, I-5.6.6)								
		Each							
			4				4.00	335.78	1343.12
	Approved Amount	335.78							
45	Labour charges for erection of outdoor type panel board and meter board units with all necessary materials and labour, tools and equipments including providing cement concrete foundation bed etc., complete as per specification, with testing of as per instructions of engineer incharge of work. (Page No.156 / Item No. 13.34, BWSSB SR-2023-24)								
		Job							
			4				4.00	1642.21	6568.84
	Approved Amount	1642.21							
46	Earthing: Suppluing and fixing and wiring earth electrode for grounding circuits IC cutouts and other equipments on the meter board in the pit. The pits should be filled up with equal proportion of salt and charcoal 150mm around the pipe to complete depth. The connection from the pipe to the conduits etc. is to established through GI wire of sizes as per clause 7.3.3 of IS 732 using 12mm bolts,nuts, washers and check nuts, the pipe shall have 16 through holes of 12mm dia. (PWD Electrical SR 2022-23, P-54, Item No.12.56)								
		Job							
			4				4.00	3613.90	14455.60
	Approved Amount	3613.90							
47	Supplying & fixing miniature circuit breakers on existing MCB distribution boards using necessary fixing materials and 'C' Type curve, indicator ON/OFF, energy cross-3 with Short circuit breaking capacity of 10K and complete wiring as required confirming to IEC 60898. (PWD Electrical SR 2023-24 P-18, I- 5.18.9)								
		Each							
			4				4.00	3179.40	12717.60
	Approved Amount	3179.40							
48	Supply and delivery at site brand new best make starter/ control panel suitable for following HP centrifugal pump confirming with ISI mark and its latest amendments. 10 to 12 HP centrifugal pump (Page No. 158 / Item No. 13.43.3, BWSSB SR 2023-24)								
		Each							
			4				4.00	40375.76	161503.04
	Approved Amount	40375.76							
49	Yield testing of borewells at final depth with a minimum of 10 hours continuously with the help of pump testing unit including the cost of transportation charges, crew charges and cost of consumables. (Sl No.12.9, Page No.140, BWSSB SR 2023-24)								
		Each							
			4				4.00	18467.52	73870.08
	Approved Amount	18467.52							
50	Supplying of TPST with rewirable porcelain channels in SM enclosure. Made out of 14 SWG powder coated paint of approved colour. 32A (Page No-14 , Item No-5.5.1, ELE SR 2023-24)								
		Nos							
			4				4.00	1751.35	7005.40

	Particulars	Unit	Nos	L in m	B in m	D in m	Quantity	Rate in Rs.	Amount in Rs.
	Approved Amount	1751.35							
51	Supplying and fixing LED Type panel board indicating lamp with required colour Suitable for 220 V AC 50Hz 12/24 V DC Group 'A' as per the Directions of Egineer In-Charge.								
		Nos							
			4		3.00		12.00	**530.24**	6362.88
	Approved Amount	530.24							
52	Supplying & fixing of Porcelain fuse channel with cutout on existing wooden/panel using necessary nuts, bolts and washers. (PWD Electrical SR 2023-24 P-14, I-5.7.3)								
		Each							
			4	6.00			24.00	**412.87**	9908.88
	Approved Amount	412.87							
53	Supplying and fixing angle iron frame work fabricated out of M.S. angle iron.. and M.S. Flat.....with bolts, washers etc., and painted with 2 coats of red oxide and then two coats of approved paint. 40 x 40 x 6 mm (PWD Electrical SR 2023-24 , Page NO:20, Item No:5.41.1).(Per leg 2. 5MtrX2 Nos legs)-5.00 Mtr Per Box								
		rmt							
			4	5.00			20.00	**314.03**	6280.60
	Approved Amount	314.03							
54	Supplying Fully Automatic Star- Delta Starter Unit Push Button Type With Suitable Wires 3 Contractors, One Adjustable Thermal Timer Mounted on a Common Base Plate held in Steel Enclosure For Use on 400/440 Volts 3 Phase and Wired after Fixing to the Exisiting Wooden Board For Motor, Above 12.5 HP upto 25 HP (Page No-14 , Item No-5.2.2, ELE SR 2023-24)								
		Nos							
	1) Group "A" upto 15 HP		4				4.00	**9023.41**	**36093.64**
	Approved Amount	9023.41							
55	BESCOM Deposit charges and misc								
		L/S							
							0.00	**15444.00**	**0.00**
	Approved Amount	15444.00							
								Total Construction Cost	**6032393.43**
								Add GST Charges 18%	**1085830.82**
								Bescom Charges	86000.00
								Sub Total-2	7204224.25

Assistant Engineer
Ward No.01
BBMP, Bangalore

Asst. Executive Engineer
Yelahanka Sub Division
(BBMP Ynk. Zone)
Yelahanka, Bangalore

Assistant Executive Engineer
Yelahanka Sub Division
BBMP, Bangalore

Executive Engineer
Yelahanka Division
BBMP, Bangalore

Technical Sanction
Accorded For Rs. 7204224.25
Head of A/C. D3726
CER NO :.42..... Dt:.19/06/24